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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,495	12/30/2004	Ingela Petersson	0104-0497PUS	5386
2292 7590 05/14/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER MAL HAOD				
ART UNIT 3732		PAPER NUMBER		
NOTIFICATION DATE 05/14/2008		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/519,495

Applicant(s)

PETERSSON ET AL.

Examiner

HAO D. MAI

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,6-11 and 13-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6-11 and 13-2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The indicated allowability of claims 13-20 is withdrawn in view of the newly discovered reference(s) and/or new ground(s) of rejection as followed:

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claim 1-2, 11, 13-14, and 17-20, are rejected under 35 U.S.C. 102(b) as being anticipated by Leitao (6069295).**

Leitao discloses an implant and method for treating the implant surface with hydrofluoric acid (column 2 lines 49-51) in order to provide a roughness of pores and peaks to the implant surface. Leitao discloses the average peak distance, i.e. the pore diameter, to be from 0.01 μm to 0.2 μm for implant made of titanium material (column 1 lines 52-53), which covers the claimed range of $\leq 1 \mu\text{m}$ (claim 1) or .50 nm to 1 μm (claim 2). The pore depth is disclosed to be from .02 μm - 2 μm (column 1 lines 60-62), which covers the claimed range of $\leq .5 \mu\text{m}$ (claim 1) or 50 – 500 nm (claim 2).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made

to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3, 6-10, and 15-16, are rejected under 35 U.S.C. 103(a) as being unpatentable over Leitao (6069295) in view of Hama et al. (4818559).

Leitao discloses the invention substantially as claimed. However, Leitao is silent to providing a macroroughness by blasting the surface prior to providing the microroughness. Leitao is also silent to the various ranges of the root-mean-square roughness, the concentration of the hydrofluoric acid, and the period of time of treating/etching.

Hama et al. disclose providing a roughness to an implant surface by blasting the surface prior to chemical treating/etching (column 3 lines 55-59). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Leitao by blasting prior to chemical treating/etching the implant surface in order to provide a better adhesion between the core and the coating layer as explicitly taught by Hama et al.

Furthermore, It would have been obvious to one having ordinary skill in the art at the time the invention was made to make an implant with a surface roughness with the claimed range of root-mean-square roughness, concentration of the hydrofluoric acid, and the period of time of treating/etching. (1) Such ranges are well within the skill of an artisan obtained via routine experimentation in order to achieve optimum results. (2) Differences in such ranges will not support the patentability of the subject matter encompassed by the prior arts unless there is evidence indicating such measurements are critical. MPEP §§ 2144.05.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HAO D. MAI whose telephone number is (571) 270-3002. The examiner can normally be reached on Monday-Friday. If attempts to reach the examiner by telephone are

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unsuccessful, the examiner's supervisor, Cris Rodriguez can be reached at (571) 272-4922.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/Hao D Mai/
Examiner, Art Unit 3732**

**/John J Wilson/
Primary Examiner
Art Unit 3732**